

Abstract

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Antifungals based on dolastatin 10¹ and four structural modifications
thereof (herein "^{peptides}peptides") and methods of treating a host afflicted with a fungi-
5 induced infection are herein-described. In broth macrodilution assays, these
peptides were fungicidal for ^{American Type Culture Collection}ATCC strains and clinical isolates of *Cryptococcus*
neoformans. Specificity for *C. neoformans* was also demonstrated in the
solid-phase disk diffusion assay, and fungicidal activity confirmed in killing
kinetics experiments. Broth macrodilution minimum inhibitory and minimum
10 fungicidal concentrations for the most potent modification ranged from
0.0975-1.56 µg/ml and 0.0975-6.24 µg/ml, respectively. The minimum
inhibitory concentrations were nearly identical in the presence of human serum,
but increased with lowered pH. Suitable dosage forms for use of the novel
antifungals are also described.